

Material Safety Data Sheet

LGflex EBN.W

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

a) Product Name: LGflex EBN.W

b) Recommended use of the chemical and restrictions on use:

- Recommended use : wrap

- restrictions on use : no data available

c) Manufacturer/Supplier/Distributor Information

- Name: LG Chem, Ltd.

- Address

Naju Plant: 1, SONGWAL-DONG, NAJU-SI, JEOLLANAM-DO, 520-130, KOREA

- Emergency phone number : 82-61-330-1261

CREATION DATE: 08/05/2005 REVISION DATE: 02/24/2015

SECTION 2 HAZARDS IDENTIFICATION

a) Hazard/Risk Classification

- Chronic aquatic toxicity: no data available

b) Label elements including precautionary statements

- Symbol : no symbol

- Signal Word : no signal word

- Hazard/Risk Statement : no data available- Precautionary Statement : no data available

c) Other Hazard/Risk which are not included in the classification criteria (e.g. dust explosion hazard):

- NFPA RATINGS (SCALE 0-4): HEALTH=0 FIRE=1 REACTIVITY=0

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name Other name CAS number or Other identification number Content (%)

Chemical Name	Trade name/Synonym	CAS number	Content(%)
Hexanoic acid, 2-ethyl-, mixed diesters with benzoic acid and triethylene glycol	LGflex EWN.W	852227-26-0	100%

SECTION 4 FIRST AID MEASURES

a) Eye contact:

Flush eyes with plenty of water until no evidence of chemicals remains at least for 15~20 minute. Wash eyes with plenty of water immediately, holding the eyelids apart. Immediately seek medical advice.

b) Skin contact:

Flush with large amounts of water and soap. If irritation develops, get medical attention.

c) Inhalation:

Remove from exposure area to fresh air immediately.

Apply artificial respiration if necessary.

Keep patient warm and at rest.

Treat symptomatically.

Immediately seek medical advice.

d) Ingestion:

If victim vomits, head should be kept below hips to keep respiratory tract.

Treat symptomatically.

Immediately seek medical advice.

e) Indication of immediate medical attention and notes for physician: no data available

SECTION 5 FIRE FIGHTING MEASURES

- a) Suitable (and unsuitable) extinguishing media:
- Use foam, dry chemical, or water spray to extinguish fire.
- b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products): Thermal decomposition products may include toxic or hazardous gases.
- c) Special protective equipment and precautions for fire-fighters:

Move container from fire area if you can without risk.

Not scattering the spilled material using a high-pressure flow.

Dike for later processing.

Use suitable extinguishing media.

Avoid inhalation of hazardous vapors, stand downwind.

SECTION 6 ACCIDENTAL RELEASE MEASURES

a) Personal precautions, protective equipment and emergency procedures:
Stop leak if you can do it without risk.

- b) Environmental precautions and protective procedures: no data available
- c) Methods and materials for containment and cleaning up:
- For Small spills: Absorb with sand or other non-combustible material.

Collect spilled material in appropriate container for disposal.

Keep unnecessary people away, isolate hazard area and deny entry.

- For Large spills : no data available

SECTION 7 HANDLING AND STORAGE

- a) Precautions for safe handling:
 - Keep container closed. Avoid breathing mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Handle and open containers with care.
- b) Conditions for safe storage (including any incompatibilities): Store in a cool, well ventilated place away from incompatible materials. Do Not handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight.

SECTION 8 EXPOSURE CONTROLS & PERSONAL PROTECTION

- a) Control parameters (e.g. occupational exposure limit values, biological limit values): No occupational exposure limits established by OSHA, ACGIH, or NIOSH.
- b) Appropriate engineering controls:

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

- c) Personal protective equipment
- Respiratory protection:

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum.

Consider warning properties before use.

Any chemical cartridge respirator with organic vapor cartridge(s).

Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).

Any air-purifying respirator with a full facepiece and an organic vapor canister.

- Eye protection: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
- Hands protection: Wear appropriate chemical resistant gloves.
- Body protection: Wear appropriate chemical resistant clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance (physical state, color etc): transparent liquid

b) Odor: faint odor

c) Odor threshold: no data available

d) pH: no data available

e) Meting point/freezing point: -55 °C

f) Initial boiling point and boiling range: 337 ℃ (760mmHg)

g) Flashing point : 220 ℃

h) Evaporation rate: no data available

i) Flammability Class(OSHA): no data available

j) Upper/lower flammability or explosive limits: no data available

k) Vapor pressure: 5.75 kPa(37.8℃)

I) Solubility: no data available

m) Vapor density: no data available n) Relative density: 0.9993 @ 20 ℃

o) Partition coefficient: n-octanol/water: 3.5±0.5

p) Auto-ignition temperature: 375 ℃

q) Decomposition temperature: no data available

r) Viscosity: 18 mPa.s (20 ℃) s) Formula mass: 380.49

SECTION 10 STABILITY AND REACTIVITY

a) Chemical stability and possibility of hazardous reactions:

Stable under normal temperatures and pressures.

Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

b) Conditions to avoid (e.g. static discharge, shock or vibration, etc):

Avoid heat, flames, sparks and other sources of ignition.

Avoid contact with incompatible materials.

- c) Incompatible materials: oxidizing materials
- d) Hazardous decomposition products: Thermal decomposition products oxides of carbon

SECTION 11 TOXICOLOGICAL INFORMATION

- a) Information on the likely routes of exposure: no data available
- b) Health hazards information
- Acute toxic: LD50 > 5,000mg/kg (mouse)
- Skin corrosive/irritant: Non-irritant (rabbit)
- Serious eye damage/eye irritation: Non-irritant (rabbit)
- Respiratory sensitization: no data available
- Skin sensitization: no data available

- Carcinogenicity: no data available
- Germ Cell Mutagenicity: Negative.
- Reproductive toxicity: no data available
- Specific target organ toxicity (single exposure): no data available
- Specific target organ toxicity (repeated exposure): no data available
- Aspiration hazard: no data available

SECTION 12 ECOLOGICAL INFORMATION

- a) Aquatic and terrestrial ecotoxicity: no data available
- b) Persistence and degradability:
- Persistence: no data available
- Degradability: no data available
- c) Bioaccumulative potential: no data available
- Biodegradable (28 days): DOB degradation rate 90.9% GC assay Hydrolysis 100%
- d) Mobility in soil: no data available
- e) Other adverse effects: no data available

SECTION 13 DISPOSAL CONSIDERATIONS

- a) Disposal method: Dispose in accordance with all applicable regulations.
- b) Disposal precaution (including the disposal method of contaminated container and packaging):

Discharge, treatment, or disposal may be subject to national, state or local laws.

SECTION 14 TRANSPORT INFORMATION

- a) UN number: no classification
- b) UN proper shipping name: N/A
- c) Transport hazard class: N/A
- d) Packing group (if applicable): N/A
- e) Marin pollution (yes/no): no data available
- f) Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: N/A

SECTION 15 REGULATORY INFORMATION

- a) Industrial Safety and Health Act: Not Listed
- b) Toxic Chemical Control Act

- U.S. REGULATIONS

TSCA inventory status: Not listed. TSCA 12b export notification: Not listed.

- c) Dangerous Material Safety Control Act: no data available
- d) Wastes Management Act: no data available
- e) Other requirements in domestic and other countries: no data available

SECTION 16 OTHER INFORMATION

a) Information source and references:

Korea Institute of Toxicdogy

Safe Pharm Laboratories

LG Chem, Research Park, Analytical R&D Center

Toxicology Center LG Life Science R&D Park

Korea Testing & Research Institute For Chemical Industry

Shanghai Academy of Environmental Sciences

b) Issuing date: 08/05/2005

c) Revision number and date: 4th Revision 02/24/2015

d) others: -

Depending on the country or region, and may be different from the information contained in this MSDS,

it may not match the actual content of the regulations,

it is your responsibility to verify compliance with the relevant provisions of the local government and who is the buyer and handle.

Material safety data sheets providing safety precautions that should be observed in handing and storing LG chem products. Neither LG chem company nor its marketing affiliates shall be responsible for the use of this information, or of any product method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of merchantability or fitness of any product, and nothing herein waives any of the seller's conditions of sale.

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